

MAY 22 2007

**CERTIFICATE OF TRANSMISSION**

Date of Transmission: May 22, 2007

Type of Document(s):

- Fee Transmittal Sheet (PTO/SB/17) (1 pg)
- Supplemental Information Disclosure Statement (3 pages)
- Supp. Information Disclosure Form (PTO/SB/08A) (1 pg)
- Copies of 4 References (54 pages)

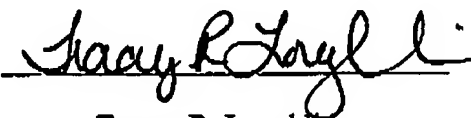
Serial No.: 10/809,072

Inventors: BULLIED et al.

Title: SINGLE CRYSTAL INVESTMENT CAST COMPONENTS  
AND METHODS OF MAKING SAME

File Reference: EH-11132

I hereby certify that the documents identified above are being facsimile transmitted to the United States Postal Service at 571-273-8300 on the date indicated above, addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Tracey R. Loughlin

MAY 22 2007

PTO/SB/17 (12-04)

Approved for use through 07/31/2008. OMB 0551-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**  
**For FY 2005**☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 180**Complete if Known**

Application Number	10/809,072
Filing Date	March 25, 2004
First Named Inventor	Steven J. Bullied et al
Examiner Name	Kuang Y. Lin
Art Unit	1725
Attorney Docket No.	PA-085,11132-US (EH-11132)

**METHOD OF PAYMENT (check all that apply)**
☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 21-0279 Deposit Account Name: Pratt & Whitney

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

<b>Total Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
0 - 20 or HP =	0 x	50 =	0			
HP = highest number of total claims paid for, if greater than 20						
<b>Indep. Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
0 - 3 or HP =	0 x	200 =	0			
HP = highest number of independent claims paid for, if greater than 3						

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
- 100 =	/ 50 =	(round up to a whole number) x		

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other: Supplemental IDS fee per 37 C.F.R. § 1.17(p)

180.00

**SUBMITTED BY**

Signature		Registration No. 51,969 (Attorney/Agent)	Telephone 860-585-6127
Name (Print/Type)	Tracey R. Loughlin		Date May 22, 2007

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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MAY 22 2007

EH-11132

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: BULLIED et al.  
Serial No.: 10/809,072  
Title: SINGLE CRYSTAL INVESTMENT CAST  
COMPONENTS AND METHODS OF MAKING  
SAME  
Filing Date: March 25, 2004  
Examiner: Kuang Y. Lin  
Art Unit: 1725

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Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Pursuant to Applicant's duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the documents listed on the attached Form PTO/SB/08A are being brought to the attention of the Examiner in charge of the above-referenced Application. In accordance with 37 C.F.R. §1.97(g), no representation is being made that a search has been conducted, or that this statement encompasses all the possible relevant information. In accordance with 37 C.F.R. §1.97(h), no inference should be made that the information and references cited herein are prior art, or that they are material to patentability, merely because they are included in this statement.

The Examiner is respectfully requested to initial the space adjacent to the listing of each document on Form PTO/SB/08A, and return a copy of the initialed Form PTO/SB/08A with the next communication to Applicant, to confirm that these documents have been considered by the Examiner and made of record in this Application.

The below-referenced information is presented so that the Patent and Trademark Office may, in the first instance, determine any materiality thereof to the claimed invention. See 37 C.F.R. §§1.104(a) and 1.104(b) concerning the PTO duty to consider

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and use any such information. It is respectfully requested that the information be expressly considered during the prosecution of this Application, and that the references be made of record therein and appear among the "References Cited" on any patent that issues therefrom.

This paper is being submitted in accordance with:

- ☐ 37 C.F.R. § 1.97(b):
  - ☐ With the application;
  - ☐ Within 3 months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d);
  - ☐ Within 3 months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application;
  - ☐ Before the mailing of a First Office Action on the merits; or
  - ☐ Before the mailing of a First Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114.
- ☐ 37 C.F.R. § 1.97(c) – after the period specified in 37 C.F.R. § 1.97(b) but before the mailing date of any of a Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in this application, whichever is earlier; and includes:
  - ☐ The required statement made below; or
  - ☐ The \$180 fee specified in 37 C.F.R. § 1.17(p) for submission of this IDS;
- ☒ 37 C.F.R. § 1.97(d) – after the period specified in 37 C.F.R. § 1.97(c) but on or before payment of the Issue Fee; and includes:
  - ☒ The required statement made below; and
  - ☒ The \$180 fee specified in 37 C.F.R. § 1.17(p) for submission of this IDS;

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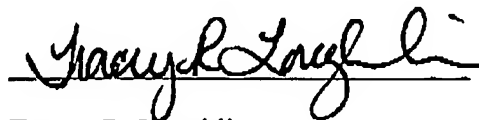
MAY 22 2007

- ☒ 37 C.F.R. § 1.97(e) – required statement:
- ☒ Each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this IDS; or
- ☐ No item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three (3) months prior to the filing of this IDS.
- ☒ A copy of the European Search Report in which said documents are cited is enclosed.

If the fee of \$180 is incorrect, please charge any additional fees due, or credit any overpayment, to Deposit Account No. 21-0279, Order No. EH-11132. If the Examiner has any questions or wishes to discuss this Application, the Examiner is kindly encouraged to telephone the undersigned.

Respectfully submitted,

Date:

05/22/07

Tracey R. Loughlin  
USPTO Reg. # 51,969  
Attorney for Applicant

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MAY 22 2007

PTO/SB/08A (08-03)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449B/PTO <b>SUPP</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/809,072
				Filing Date	March 25, 2004
				First Named Inventor	BULLIED et al.
				Group Art Unit	1725
				Examiner Name	Kuang Y. Lin
Sheet	1	of	1	Attorney Docket Number	EH-11132

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code * (if known)			
	1	US-5,062,469	11-05-1991	Monte et al.	
	2	US-4,180,119	12-25-1979	Burd et al.	
	3	US-4,289,570	09-15-1981	Terkelsen	
	4	US-6,497,272	12-24-2002	Maslen	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T2
		Country Code2 - Number4 - Kind Code * (if known)				
	5	EP 0 087 379 A1	08-31-1983	United Technologies Corp.		
	6	GB 2 037 200 A	07-09-1980	United Technologies Corp.		
	7	DE 42 09 227 C1	05-06-1993	Access		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	8	European Search Report dated April 19, 2007.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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